

**METHOD AND SYSTEM FOR CALIBRATING A LOOK-DOWN
LINEAR ARRAY SCANNER UTILIZING A FOLDED OPTICAL PATH**

ABSTRACT OF THE DISCLOSURE

A system and method are disclosed which provide a look-down digital imaging device capable of scanning a calibration area included within such look-down digital imaging device to capture image data for the calibration area and calibrate itself based on analysis of such captured image data. More specifically, a preferred embodiment includes a calibration area that is integrated internally within the look-down digital imaging device. When performing calibration in such a preferred embodiment, the scan head of the look-down digital imaging device is operable to align itself with the calibration area to allow for a scan of the calibration area (i.e., the capture of digital image data of the calibration area). In one embodiment, a look-down digital imaging device does not achieve a focused scan of the calibration area, but is capable of utilizing captured unfocused digital imaging data for calibration. In a preferred embodiment, a look-down digital imaging device achieves a focused scan of the calibration area, thereby enabling a further accurate calibration. More specifically, a preferred embodiment folds the optical path of the reflected light from the calibration area in order to have the optical path of such calibration area accurately mimic the optical path of an original to be scanned, thereby allowing for focused calibration to be achieved.